

LINDIL C. FOWLER, JR., GENERAL COUNSEL COLIN K. LINEBERRY, DIRECTOR HEARINGS SECTION

# RAILROAD COMMISSION OF TEXAS OFFICE OF GENERAL COUNSEL

December 6, 2007

OIL AND GAS DOCKET NO. 8A-0252926

THE APPLICATION OF CHOLLA PETROLEUM, INC. TO INJECT FLUID INTO A FORMATION PRODUCTIVE OF OIL OR GAS, K MAN LEASE WELL NO. 3, TONI-C-(NOODLE CREEK) FIELD, KENT COUNTY, TEXAS

HEARD BY: Thomas H. Richter, P.E., Technical Examiner

Marshall Enquist, Hearings Examiner

**APPLICANT:** 

REPRESENTING:

Cholla Petroleum, Inc.

Jamie Nielson, attorney Greg Cloud, P.E.

Loyd Powell

PROTESTANT:

Chad Smith, lawyer Randal Bollinger

Randall Bollinger

### **PROCEDURAL HISTORY**

Date of Application:

Date of Notice:

Date of Hearing:

Date of Transcript:

Proposal For Decision Issued:

August 2, 2007

August 15, 2007

November 9, 2007 November 26, 2007

December 6, 2007

## **EXAMINERS' REPORT AND PROPOSAL FOR DECISION** STATEMENT OF THE CASE

This is the application of Cholla Petroleum, Inc. ("Cholla") to re-enter the K Man Well No. 3 and re-complete the well as a saltwater disposal well for the disposal of its own lease produced water. The Protestant, Randal Bollinger, the surface owner, asserts Cholla did not give proper notice, the injection interval is not isolated to just one formation, the structural integrity of the surface casing is of concern and the use of the subject well is a matter of litigation in District Court

### **DISCUSSION OF THE EVIDENCE**

#### APPLICANT'S EVIDENCE

Cholla proposes the re-entry of the K Man Well No. 3 (formerly the Dallas Kenady Well No. 1) and re-completing the well as a saltwater disposal well to dispose of saltwater produced by its own lease producing wells. The proposed disposal well was drilled and properly plugged by Cecil C. Gillum in March 1977. Cholla has re-entered the well and installed longstring casing.

The well is completed as follows:

- Surface casing (8-5/8") is set at 310' and cemented from the casing shoe to the ground surface. This is confirmed by Form W-3 and W-15 filed by Cecil C. Gillum in 1977.
- Longstring casing (5-1/2") is set at 4,093' and cemented from the casing shoe to a height 50' from the ground surface as determined by cement bond log. The re-completion work was performed by Cholla in June 2007.

Cholla proposes setting tubing (2-3/8") at  $\pm 3,500'$  on a packer. The disposal interval will be from 3,550' to 4,090'. The depth to the base of the deepest fresh water is 300' (TCEQ letter dated May 22, 2007). The maximum daily injection volume is 1500 BWD (average 500 BWD) at a maximum injection pressure of 1700 psig. The injection interval is the Noodle Creek limestone formation. The existing perforations are from 4012' - 4018'. It is proposed that three additional sets of perforations will be added: 3550' - 3580'; 3700' - 3750'; and 3898' - 3904'.

The subject well will be used to dispose of produced water from Cholla's K Man Well No. 1 in the Wallace Ranch, NE. (Noodle Creek) Field and the K Man Well No. 2 in the Toni -C-(Noodle Creek) Field (both fields require 40 acre density). Well No. 1 was completed in July 2007 (perf's from 3883' - 3885'), no gas and 126 BWD. Well No. 2 was completed in April 2007 (openhole from 3832' - 3842) and potentialed at 10 BOPD, no gas and 90 BWD (the well is currently shut-in waiting of the results of this application).

There are no producing wells within 1/4 mile of the subject disposal well. Besides the two K Man wells, there are two wells right at the ½ mile radius that were properly plugged and abandoned in 1984 and 1988 respectively. There are no other operators within ½ mile.

The use of the subject disposal well is in the public interest for the safe and proper disposal of lease produced saltwater. The public interest is served by the additional recovery of hydrocarbon reserves that would otherwise go unrecovered. Operating expenses for the subject two producing wells are \$17,000/month (\$13,500/month for saltwater hauling and disposal). The disposal well will lower the operating lease expense to \$6,000/month and facilitate the economic recovery of an

<sup>&</sup>lt;sup>1</sup> Cholla Petroleum obtained a 239.5 acre lease from John Fowler on August 7, 2007.

additional 15,600 BO. Anticipated ultimate recovery for the existing conditions are 42,340 BO over a 6 year period. Anticipated ultimate recovery for an on-lease disposal are 57,900 BO over a 13 year period.

Cholla Petroleum , Inc. is an operator in good standing. It has posted a \$250,000 letter of credit for financial assurance as required by the Commission.

Proper notice was provided in accordance with the notice provisions of Statewide Rule 46. Notice was given to the surface owner and all operators within one-half mile. Notice of this application was published in the *Texas Spur*, a newspaper of general circulation in Kent County, on June 28, 2007. The application was filed with the Kent County Clerk on May 17, 2007. Cholla argues that Bollinger can not raise notice defects on behalf of a third party.

Bollinger filed a petition in the Kent County District Court. On October 30, 2007, the Court denied Bollinger's request for a Temporary Injunction on all counts. Cholla has a lease and the lease agreement allows the right to inject fluid. There are no other leases to be served by the proposed injection well.

#### PROTESTANT'S EVIDENCE

Bollinger asserts that the application should be dismissed or denied based on its contention that notice of the application and hearing are deficient. Bollinger believes that the adjoining surface/mineral owner should have also received notice of the subject application. It is further argued that as Salt Fork Creek is a contributary of the Brazos River and is within ½ mile of the subject well, the Salt Fork Underground Water Conservation District should have received notice of the application.

Bollinger argues that Cholla does not have a good faith claim to re-enter and use the subject previously plugged well as a matter of law. This is a matter that is docketed with the 39th District Court (Haskell, Kent, Stonewall and Throckmorton Counties). The subject hearing should be continued until all District Court remedies have been resolved. Further, one of the two producing wells are not on the same "lease" as the two wells are designated in different fields.

Bollinger submits that Cholla has not made an investigation of the mechanical integrity of the surface casing and cement that was set in the subject well in 1977. A mechanical integrity investigation should be made for assurance.

Bollinger argues that the proposed injection interval includes more than just the Noodle Creek Formation found at 3830' as reported on Form W-2 for the K Man Well No. 2. The Form W-2 for the K Man Well No. 1 reports the Dothan Formation at 3700'. The proposed disposal interval extends from 3550' - 4090'. There may be other intervals contained within the 540' disposal zone which may be productive. Cholla has not presented any evidence to show that the other possible intervals are not productive. If the application is approved, the injection interval should be narrowed

to just a single formation, the Noodle Creek, and not multiple formations.

### **EXAMINERS' OPINION**

The examiners recommend the application be approved pursuant to §27.051 of the Texas Water Code and Commission Statewide Rule 46.

There is no evidence to indicate that the operation of this well will adversely impact the water quality of any surface water or subsurface usable quality water and will not harm other oil, gas or mineral resources.

Bollinger made a motion to dismiss or deny the Cholla application based on its contention that notice of the application and hearing were deficient. The examiners believe the motion should be denied. Bollinger does not have standing to complain about a failure of notice to anyone else. McDaniel v. Texas Natural Res. Conservation Com'n, 982 S.W.2d 650, 654 (Tex.App.-Austin 1998, pet. denied); Copher v. First State Bank, 852 S.W.2d 738, 740 (Tex.App.-Fort Worth 1993, no writ); American Operating Co. v. Railroad Comm'n of Tex., 744 S.W.2d 149, 155 (Tex.App.-Houston 1987, writ denied). Rule 46 does not require any other notice. There is no merit in Bollinger's contention that this proceeding must be continued until the exhaustion of judicial remedies in Kent County. "The function of the Railroad Commission in this connection is to administer the conservation laws. When it grants a permit to drill a well it does not undertake to adjudicate questions of title or rights of possession. These questions must be settled in the courts.....in short, the order granting the permit is purely a negative pronouncement. It grants no affirmative rights to the permittee to occupy the property, and therefore would not cloud his adversary's title. It merely removes the conservation laws and regulations as a bar to drilling the well, and leaves the permittee to his rights at common law." Magnolia Petroleum Co. v. Railroad Commission, 170 S.W.2d 189, 191 (Tex. 1943).

Bollinger challenges that the proposed injection interval may include more than just the Noodle Creek producing formation and that there may be other productive formations present. The evidence shows that the two existing wells on the lease are productive from the Noodle Creek Formation. It is assumed that Cholla is a prudent operator and thus would be alert to any "potentially productive intervals" and through log analysis in drilling the wells would have been cognizant in analyzing/testing any zones. Cholla submits through its log analysis, there are porous intervals above the Noodle Creek "pay" interval that would accept water injection. Thus, an investigation was performed by Cholla of the entire disposal interval. Bollinger presented no contrary evidence to refute Cholla's determination.

Cholla substantiated that the subject well is in the public interest. The safe and proper disposal of produced saltwater serves the public interest. Produced water will come exclusively from the Cholla lease that it operates. This is <u>not</u> a commercial disposal well. The projected normal volume of the produced water will be transferred through a "closed" pipeline system. By reducing lease operating expenses, additional hydrocarbons will be recovered. The production of

hydrocarbons serves the general public interest. The Commission's Rules concerning underground disposal and surface facilities are premised to assure the protection of fresh water above and below the ground surface (well completion technique, proper cementing, proper plugging and saltwater handling). There is no evidence to indicate that the operation of the subject injection well will adversely impact the quality of any surface water or subsurface water.

#### **FINDINGS OF FACT**

- 1. Notice of this hearing was given to all persons required to be given notice by the provisions of Statewide Rule 46. Notice of this hearing was given to all affected persons, at least ten (10) days prior to the date of the hearing. Notice of this application was published in the *Texas Spur*, a newspaper of general circulation in Kent County, on June 28, 2007. The application was filed with the Kent County Clerk on May 17, 2007.
- 2. Cholla Petroleum, Inc. proposes the re-entry of the K Man Well No. 3 (formerly the Dallas Kenady Well No. 1) and re-completing the well as a saltwater disposal well to dispose of saltwater produced by its own lease producing wells.
  - a. Surface casing (8-5/8") is set at 310' and cemented from the casing shoe to the ground surface. Longstring casing (5-1/2") is set at 4,093' and cemented from the casing shoe to a height 50' from the ground surface as determined by cement bond log.
  - b. Tubing (2-3/8") will be set at  $\pm$  3,500' on a packer.
  - c. The disposal interval will be from 3,550' to 4,090'. The injection interval is the Noodle Creek limestone formation. The existing perforations are from 4012' 4018'. It is proposed that three additional sets of perforations will be added: 3550' 3580'; 3700' 3750'; and 3898' 3904'.
  - d. The depth to the base of the deepest fresh water is 300' (TCEQ letter dated May 22, 2007).
  - e. The maximum daily injection volume is 1500 BWD (average 500 BWD) at a maximum injection pressure of 1700 psig.
- 3. The subject well will be used to dispose of produced water from Cholla Petroleum's, K Man Well No. 1 in the Wallace Ranch, NE. (Noodle Creek) Field and the K Man Well No. 2 in the Toni -C- (Noodle Creek) Field which are included in the 239.5 acre lease.
- 4. There are no producing wells within 1/4 mile of the subject disposal well and no other operators within ½ mile.

- 5. Injection zone isolation has been accomplished to prevent fluid migration and protect usable quality subsurface waters.
  - a. There is sufficient shale above the injection interval which provides an impermeable barrier to fluid migration.
- 6. Injection into the proposed disposal well will not result in the loss of otherwise recoverable reserves.
- 7. The safe and proper disposal of produced saltwater serves the public interest.
- 8. The public interest is served by the additional recovery of hydrocarbon reserves that would other wise go unrecovered.
  - a. Operating expenses for the subject wells will lower the operating lease expense and facilitate the recovery of an additional 15,600 BO.
- 9. The operation of the subject well will not adversely impact the water quality of any surface water or subsurface usable quality water the proposed manner of equipping and operating the well will permit injected fluids from leaving the permitted disposal zone.
- 10. Cholla Petroleum, Inc. is an operator in good standing and has posted a \$250,000 letter of credit for financial assurance as required by the Commission./

### **CONCLUSIONS OF LAW**

- 1. Proper notice was timely given to all parties entitled to notice pursuant to applicable statutes and rules.
- 2. All things have occurred and have been accomplished to give the Commission jurisdiction in this case.
- 3. The use of the proposed injection well will not endanger oil, gas, or geothermal resources or cause the pollution of surface water or fresh water strata unproductive of oil, gas, or geothermal resources.
- 4. The applicant has complied with the requirements for approval set forth in Statewide Rule 46 and the provisions of Sec. 27.051 of the Texas Water Code.
- 5. The use of the proposed injection well is in the public interest pursuant to Sec 27.051 of the Texas Water Code.
- 6. Approval of the application will prevent waste of hydrocarbons that otherwise would remain unrecovered.

# **EXAMINERS' RECOMMENDATION**

Based on the above findings and conclusions, the examiners recommend that the application of Cholla Petroleum, Inc. for a disposal permit for its K Man Lease Well No. 3 be approved as set out in the attached Final Order.

Respectfully submitted,

Thomas H. Richter, P.E.

Technical Hearings Examiner Office of General Counsel

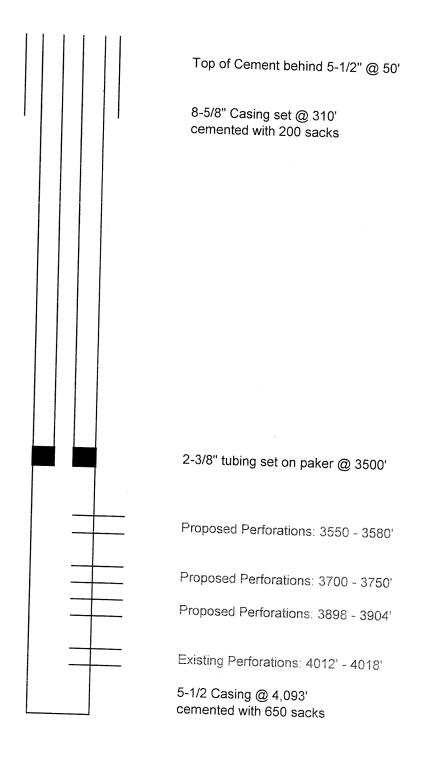
Marshall Enquist

Hearings Examiner

Office of General Counsel

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#### Wellbore Schematic Cholla Petroleum, Inc. K Man No. 3



yellow color indicates cement

Exhibit No. O & G Docket No. 8A-0252926
Date: November 9, 2007
Cholla Petroleum, Inc.